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10/615,428	07/07/2003	James P. Davidowitz	14846-97	7410

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PATENT DOCKET ADMINISTRATOR
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EXAMINER

VYAS, ABHISHEK

ART UNIT	PAPER NUMBER
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3691

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06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/615,428

Applicant(s)

DAVIDOWITZ ET AL.

Examiner

ABHISHEK VYAS

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. This action is in reply to the amendment and remarks filed on 03/12/2009.
2. Claims 1, 4, 5, 9, 11, 13, 17 are currently amended.
3. Claims 17-18 were previously presented.
4. Claims 1-18 are currently pending and have been examined.
5. Claims 1-18 are rejected.
6. This is a NON-FINAL action.

Response to Arguments

7. Applicant's arguments with respect to non-final office action mailed 12/24/2008 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 1-18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 1, 9 and 17 recite in the preamble "a system for initiating trading of a spread of two or more securities in two or more markets", the body of the claim contains "a spread engine comprising one or more processors configured to". A system or an apparatus claim should always claim the structure or the hardware that performs the function. As disclose by the specification in

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paragraph 0022, the spread engine is software. Therefore it is unclear whether the spread engine consists of software processors that carry out the recited process of the claims or whether there are hardware processors configured to execute the spread engine and its functions.

4. Claim 5 recites a computer implemented method; however it is unclear what functions are carried out by the computer. The limitations in the claim recite: "identifying spread parameters pertaining to a relationship between the securities; receiving market data...; initiating in a first market...; initiating in a second market...; initiating an FX order...;" it is vague and indefinite as to how the market data is being received (over a network? Manually entered?), Does the identification step take place on the said server or computer? And finally where are the orders being initiated? On exchange servers? Exchange computers? It is also noted that the preamble is not given patentable weight. Thus a mere recitation of computer implemented method is not sufficient to describe the transformative steps central to the claim.
5. Claims 1, 5, 9 and 17 recite various hardware and software limitations. However, it is unclear how the components in the system claims are connected, tied or linked. Are the client station (for displaying information), the database and the spread engine comprising one or more processors connected together? It is unclear how the stored information from the database or received market data, are used in the determination of the spread falling within certain parameters?
6. The dependent claims are rejected based on their dependency to the rejected independent claims.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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9. Claim 1, 9, 17 recites in the preamble "a system". The body of claims 1, 9 and 17 recite code means or "engine". Therefore the claims are non-statutory because it is directed towards software, per se, lacking storage on a medium, which enables any underlying functionality to occur. It is not clear whether instructions are in executable form and therefore there is no practical application.
10. Claim 5 is directed to a computer implemented method, but in view of the 35 USC 112 second paragraph rejections the claim lacks the recitation of a machine tied to the transformative steps of the process. Therefore Based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 CAFC (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876). Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.
11. The dependent claims are rejected based on the rejected independent claims.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3-5, 7-9, 11-13, 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al (herein after Burns) United States Patent No. : 7,243,083 in view of Gerhard United States Patent No.: 6,852,683 B1 in further view of Tsagarakis et al (herein after Tsagarakis) United States Patent Application Publication No.: 2002/0087455

10. **As per claims 1, 5, 9, 13, 17 and 18;** Burns discloses the following limitations:

- Identify spread parameters pertaining to the securities (see at least Burns column 1, lines 34-41; column 2, lines 39-51; column 4, lines 1-12).
- receive market data relating to the two or more securities of the spread; determine whether the market data falls within certain spread parameters and, if the market data falls within the certain spread parameters (see at least Burns column 5, lines 33-40; column 2, lines 39-51; column 4, lines 1-12, 16-23 and 39-46).
- (i) a client station configured to display information relating to the spread; (see at least Burns figure 5-7 and related text, column 5, lines 59-64).
(ii) At least one database configured to store information relating to the spread; displaying information relating to the spread on a client station; (see at least Burns column 19, lines 16-18).

Burns does not specifically disclose the limitation below. Gerhard, however, teaches the limitations as follows:

- initiate an FX Order to offset foreign exchange exposure resulting from the first order in the first market (see at least Gerhard column 1, lines 25-43; column 3, lines 1-25; column 4, lines 1-6 and 35-48; column 6, lines 2-29).

Burns does not specifically disclose the limitation below. Tsagarakis, however, teaches the limitations as follows:

- initiate a first order in a first market for a first security of the spread in a foreign currency; initiate a second order in a second market for a second security of the spread, whereby the second order is at a selected ratio as compared to the first order

to reduce the risk of adverse price movements in the first security (see at least Tsagarakis paragraphs 0053, 0058, 0060, 0062, 0067, 0070, 0072).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have expanded the system and method of Burns and Potter to include initiating orders in two or more markets and placing an FX order to hedge against currency exposure. One would be motivated to do so to prevent exposure loss and gain profits from various arbitrage opportunities between the various currencies of the world and taking advantage of the disparities between interest rates, exchange rates and investment yields (see at least Gerhard column 1, lines 40-43; column 2, lines 60-64; column 6, lines 2-29; Burns column 1, lines 34-50; column 4, lines 26-34; Potter column 1, lines 50-54; column 5, lines 60-61) Also see (at least Burns column 4, lines 38-51 and 55-61; column 7, lines 34-40; column 8, Equation 2; column 9, lines 7-11).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have specifically incorporated a first order of a first security and a second order of a second security in separate markets to facilitate the best available spread and pass on several cost advantages to the customer (see at least Tsagarakis paragraphs 0042 and 0044).

11. As per claim 3, 7, 11 and 15, Burns discloses the following limitation:

- convert the market data related to one or more securities in the spread to a certain currency identified in the spread parameters for the spread (see at least Burns column 6, lines 54-59).

12. As per claim 4, 8, 12 and 16, Burns discloses the following limitation:

- initiate the first order only where the market data related to one or more securities in the spread pass certain rule checks (see at least Burns column 7, lines 41-52).

13. As per claim 18, Burns discloses the following limitation:

- bid/offer size; round lot; last/bid tick direction; markets(s) open; depth of market; and position limits (see at least Burns column 5, lines 33-42, 52-57; column 15, lines 1-8).

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14. **Claims 2, 6, 10, 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al.

Gerhard and Tsagarakis as applied to claim 1 above and in further view of Raykhman United States Patent No.: 7,171,386 B1.

15. **As per claims 2, 6, 10, 14;** Burns and Potter disclose a trading system of two or more securities.

Burns and Potter do not disclose the following limitations. Raykhman, however, discloses the limitations as follows:

- the first order is a limit order and the second order is a market order, (see at least Raykhman column 3 lines 15-17; column 5, lines 35-39).
- the second order is initiated following confirmation of the first order (see at least Raykhman column 16, lines 50-63; column 18, lines 10-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the system of Burns and Potter to specify the market orders and limit orders and to place the orders in order. One would be motivated to do so to provide fair and prompt execution of orders that would maximize the hedge against exposure (see at least Raykhman column 8, lines 43-46; lines 54-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abhishek Vyas whose telephone number is 571-270-1836. The examiner can normally be reached on 7:30am-5:00pm EST Mon-Thur, ALT Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. V. /

Examiner, Art Unit 3691

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691